



A.D. 1820 N° 4478.

S P E C I F I C A T I O N

OF

JOHN BUTLER LODGE
AND
JOHN BITTLESTON, JUNIOR.

—
SPRING TRUSSES.
—

L O N D O N :

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A.D. 1820 N° 4478.

Spring Trusses.

LODGE AND BITTLESTON'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, we, JOHN BUTLER LODGE and JOHN BITTLESTON, junior, both of the Strand, in the County of Middlesex, Truss Makers, send greeting.

WHEREAS His most Excellent Majesty King George the Fourth did,
5 by His Letters Patent under the Great Seal of the United Kingdom of Great Britain and Ireland called England, bearing date at Westminster, the Twentieth day of June, in the first year of His reign, give and grant unto us, the said John Butler Lodge and John Bittleston, our eñors, adñors, and assigns, His especial licence, full power, sole privilege and authority, that we,
10 the said John Butler Lodge and John Bittleston, our eñors, adñors, and assigns, during the term of years therein mentioned, should and lawfully might make, use, exercise, and vend, within England, Wales, and the Town of Berwick-upon-Tweed, our Invention of "CERTAIN IMPROVEMENTS IN THE CON-
STRUCTION AND APPLICATION OF SPRING TRUSSES OR BANDAGES FOR THE RELIEF OR
15 CURE OF HERNIA;" in which said Letters Patent there is contained a proviso, that if we, the said John Butler Lodge and John Bittleston, shall not particularly describe as ascertain the nature of our said Invention, and in what manner the same is to be performed, by an instrument in writing under our hands and seals, or under the hand and seal of one of us, and cause the same
20 to be inrolled in His Majesty's High Court of Chancery within two calendar months next and immediately after the date of the said Letters Patent, that then the said Letters Patent, and all liberties and advantages whatsoever thereby granted, shall utterly cease, determine, and become void, as in and

Lodge & Bittleston's Impts. in the Construction & Application of Spring Trusses.

by the same, relation being thereunto had, will more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, we, the said John Butler Lodge and John Bittleston, junior, do hereby declare that the nature of our said Invention, and the manner in which the same is to be 5 performed, are particularly described and ascertained in and by the Drawing hereunto annexed, and the following description thereof (that is to say) :—

Our improvements consist in the invention and application of a reverted spring or springs which are connected or united to straps and bandages, and which form the support of the pad or pads of the trusses, the pad being affixed 10 to the spring part of the strap or bandage by means of a boss firmly united to the centre of the metallic part of pad, and which boss has either a male or female screw in it or upon it to receive a female or male screw, and by which these parts are united.

In the Drawing (in which the same letters refer to the same parts in all the 15 Figures), A, A, A, Fig. 1, represents the spring viewed edgewise, and united to B, the metallic part of the pad, by the boss C, which has a female screw in it to receive the male screw D, in the head of which screw is a slit for the purpose of turning it either way as may be required ; E is a metal plate, which is interposed between the head of the screw D and the spring A, A, A ; 20 F is an edge view of the under strap spring, which is likewise interposed between the spring A, A, A, and the boss C, and has a stud G fixed in it for the under strap to be hooked upon. In Fig. 2, A, A, A, shews a method of forming that spring of two parts, laid over each other and rivetted together at H, H ; Fig 3, an internal view of the metallic part of the pad B, and 25 its boss C ; Fig. 4, a section of those parts ; Fig. 5, an outside view, an end view, and a section of the female screw of the boss C ; Fig. 6, the male screw D ; Fig. 7, E, the metal plate ; a front and edge view of the under strap spring F, and its stud G. Fig. 9 is a front view of these several parts connected together, as indicated by the letters of reference ; and Figure 10, a 30 representation of them as united with the bandage I, I, I, and strap and buckle K, and the under strap L, L, which is united at one end to bottom M, affixed to the bandage I, I, I, and the other end of it is hooked upon the stud G. The spring A, A, A, is united is united to the bandage I, I, I, by being worked between its outer and inner parts by stitching or other proper 35 means, the outer part being generally composed of leather, and the inner of flannel covered with linen, wash leather, &c., as usual. The metallic part of the pad B is likewise covered internally with leather, and externally with several thicknesses of flannel or other soft and elastic material, and over that

Lodge & Bittleston's Impts. in the Construction & Application of Spring Trusses.

with linen, wash leather, &c. The under strap is formed of stout linen or other proper material, with a leather strap attached to it, with holes in it for the purpose of hooking it upon the stud G, and at its other end are worked two or three button-holes for fixing it upon the button M. The under strap
 5 spring F may be either covered or not with leather or other proper material. In Fig. 11, A, A, A, is the double truss spring, resembling that for the single truss, already described, excepting that the screw hole is in its centre. In Fig. 12, N, N, is a front and edge view of the metal carriage for the pads of the double truss, which has a slit O, O, near each end of it for the purpose
 10 of receiving the screws D, D, of the pads, as shewn in Fig. 13, and allowing them to be adjusted as required; and also a screwed hole in its centre for the purpose of receiving the screw P, by which it is united to the spring A, A, A, the metal plate E being first interposed. Fig. 14 is a front view of the carriage pads and under strap springs as screwed together, the dotted lines
 15 shewing the extent to which the pads may be contracted. Fig. 15 is a section of one of the pads as connected to the carriage N by the screw D, the metal plate E and under strap spring F being also shewn in their places. Fig. 16 represents the double truss carriage and pads as fitted up with bandages, straps, buckles, &c. for use, and as already described in the reference to Fig. 10.
 20 Fig. 17 is an inside view, and Fig. 18 a section, of the metallic part of a round or umbelical pad, which is to be attached by a screw to the spring shewn at Fig. 11, and to be covered and fitted up with a bandage, straps, buckles, &c., as shewn at Fig. 19, and to be applied for the relief, &c. of umbelical hernia. The springs A, A, A, and the under strap springs F must be made of well-
 25 tempered steel, and the springs A, A, A, must be tapered away from the screw hole towards the ends, and as shewn in the different Figures, and the single truss is to be accommodated to a right or left rupture, as may be required, by loosening the screw D and turning the pad and under strap spring either way, as may be necessary, and again secured by tightening the screw, the under
 30 strap can likewise be turned either way upon its button as may be necessary.

Fig. 20 is an outline of part of the human body, to shew the single truss as applied to a right side rupture.

Fig. 21 is another similar outline, to shew the applications of the double and umbelical trusses in use.

35 Fig. 22 is a transverse section of the trunk or human body, shewing the action of the single truss in use, the dotted line shewing the relaxed state of the spring before its application; and Fig. 23 is a similar section, shewing the action of the double truss in use, and likewise by the dotted line the relaxed state of the spring.

Lodge & Bittleston's Impts. in the Construction & Application of Spring Trusses.

The principal novelties and advantages of our Invention consist in the use of a reverted or reverting spring or springs, the effect of which is to do away with the unpleasant and dangerous consequences resulting from the pressure of the inverted springs in common use upon the spine and pelvis, and particularly in young subjects, by which distortion frequently takes place; 5 and likewise in the application of the under strap spring, from the elasticity of which great comfort is derived to the wearer, the support of the parts is very considerably increased, and the probability of cure very much augmented.

In witness whereof, we, the said John Butler Lodge and John Bittleston, parties hereto, have hereunto set our hands and seals, this Nineteenth 10 day of August, in the year of our Lord One thousand eight hundred and twenty.

JOHN BUTLER (L.S.) LODGE.

JN^o (L.S.) BITTLESTON, JUN^r.

AND BE IT REMEMBERED, that on the Nineteenth day of August, in 15 the year of our Lord 1820, the aforesaid John Butler Lodge and John Bittleston came before our said Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form above written. And also the Specification aforesaid was stamped according to the tenor of the Statute made for that purpose. 20

Inrolled the Nineteenth day of August, in the year of our Lord One thousand eight hundred and twenty.

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FIG. 3.

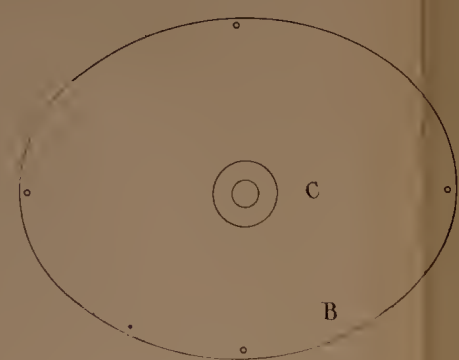


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FIG. 4.



FIG. 6.



FIG. 21.

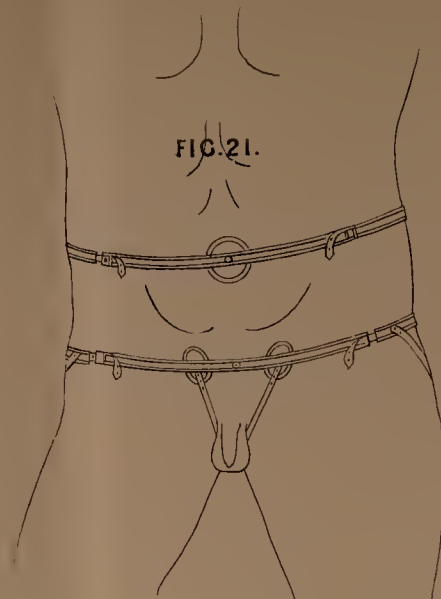


FIG. 20.

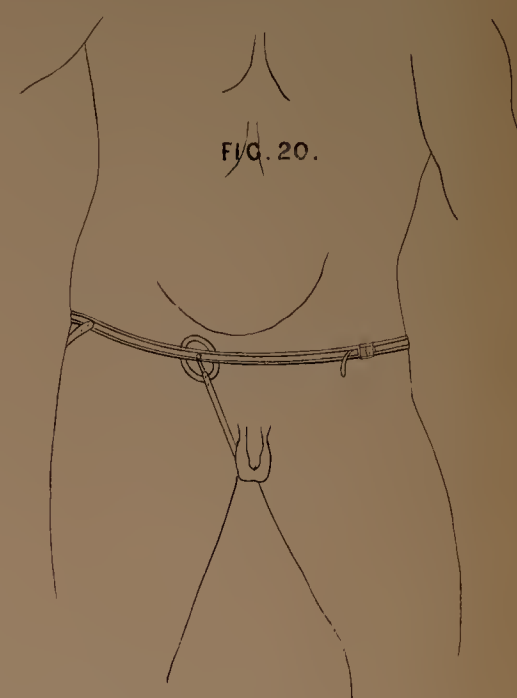


FIG. 10.

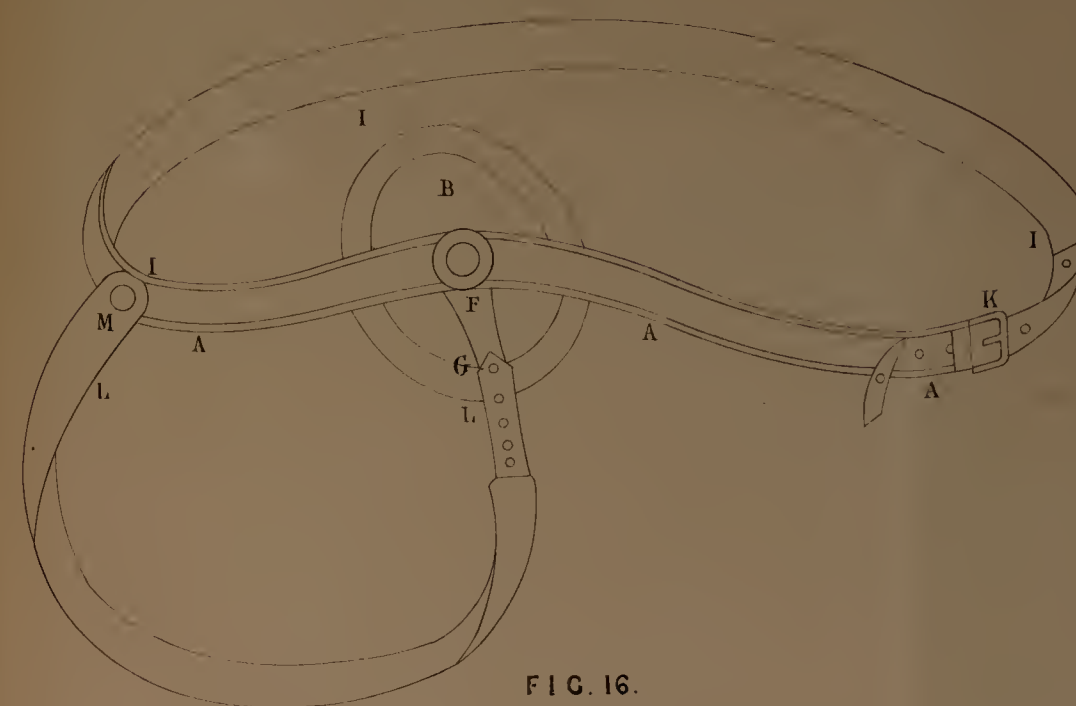


FIG. 2.

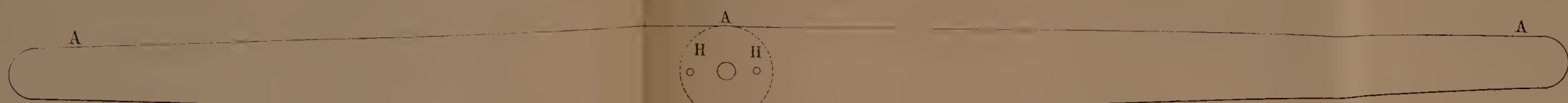


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